

existence is technologically possible, and might be implemented in any number of ways that the marketplace desires. For example, it may be possible for post-production houses, if demanded by the market, to insert Airtrax-encoded advertisements after encoding the related program with AMOL codes. Notwithstanding Airtrax's lengthy, purely speculative and simply incorrect over-generalizations of how post-production houses "normally" carry-out the encoding process, Airtrax Comments at 23-27, the fact is that some of the largest program producers -- including Paramount -- encode AMOL/SID codes onto programs before inserting commercials, and thus would not "overwrite" codes that Airtrax might someday write onto those commercials.^{25/}

29. As stated in Nielsen's Comments, it also appear to be possible for both Airtrax's, Nielsen's and other encoding machines to be modified to pause the encoding process when another code is sensed, and initiate encoding again after the sensed code is no longer present. Attached here as Exhibit B is a statement by the President of the Valley Stream Group (the manufacturer of encoders used by syndicators in connection with Nielsen's AMOL service), stating that this could be accomplished by a relatively minor modification to the encoders used by the

^{25/}Airtrax's suggestion -- that it would be more efficient for Nielsen to work with the hundreds of broadcast stations in an attempt to correct the line 20 problem than it would be for Airtrax to deal with the relatively small number of syndicators and post-production houses to assure that its codes are not overwritten -- is absurd.

syndicators to write AMOL codes.^{26/} It can be assumed that Airtrax's and other encoder likewise could be modified, especially as they are not now employed in commercial operation.^{27/}

30. The ultimate result of implementing a marketplace-driven resolution to the "compatibility" issues posed by the Commission will be the assurance that all services or alternative methods of achieving "co-existence" requested by the market, both now and in the future, will be provided using line 22. The grant of Nielsen's Request will simply allow another competitor into the market. It will not preempt in anyway any other user's right or ability to use line 22 to provide either competing or complementary services if the marketplace demands them.

^{26/}Because of the availability of this automatic pause feature, Airtrax's lengthy -- as well as entirely speculative and baseless -- discussion of how the "interval" method of encoding would operate in a manual setting, Airtrax Comments at 23-27, is totally irrelevant as well as unsupported.

^{27/}There may be other solutions that would allow all authorized users to co-exist on line 22 without adversely affecting broadcast service. For example, Airtrax's encoding process is relatively inefficient given that it uses both fields of line 22, whereas Nielsen's Codes use only one field of the line. Thus, as PBS has pointed out, PBS Comments at 3, it would seem equitable that, rather than bar Nielsen from any use of the line, less efficient users such as Airtrax and VidCode should be required to modify their use of line 22 to use fewer frames, or at most one field, of the line.

In addition, there may be ways in which Airtrax's advertising verification services could be provided without the need for use of line 22 at all. For example, Advertising Verification, Inc. offers an advertising verification service using the audio portion of the television signal.

31. Moreover, even if the facts were different and each proposed service were complementary and would preempt the others, the outcome of this proceeding should be no different. Nielsen should be granted permissive authority under the same terms and conditions that apply to the grants to Airtrax, VidCode and others. For the reasons set forth herein, the Commission traditionally has determined that the marketplace is the best mechanism for accomplishing the public policy objectives enunciated by the Commission. Even if there were technological peremption, the market will select the use that possess the greatest economic value at that time, which would, in turn, create new incentives for new technologies to overcome the peremption problem.

32. In light of the above, the only issue to resolve with respect to the competing claims of whether "co-existence" can be achieved on line 22 is why would Airtrax so actively cultivate a misunderstanding of the possibility of "co-existence" on line 22 if such co-existence were, in fact, possible. The answer to that question -- which must be understood by the Commission to place in perspective Airtrax's Opposition and substantial lobbying effort in this proceeding -- is that Airtrax is concerned not so much that it have a "fair" opportunity to compete in the market as it is to block competition from entering that market. It is apparent that Airtrax will have the opportunity to compete even

if Nielsen's request is granted because the granting of Nielsen's Request will not preempt Airtrax's use of that line. Rather, Airtrax's comments and representations make clear its desired goal is to preempt Nielsen from having the same opportunity as Airtrax to use line 22.

33. It would not, of course, be appropriate for the Commission to accede to Airtrax's anticompetitive efforts to block Nielsen's access to line 22. The Commission has rejected the concept of protecting certain competitors from the forces of the open market. Specifically, when granting television licensees the authority to transmit Nielsen's SID codes on line 20, the Commission noted certain parties' concerns that the grant of the authority would preclude others' use of that line, and responded to this concern by stating: "Because we have not reserved a line for SID signals, we believe it is clear that the transmission of SID signals, while permissible, does not preclude the use of line 20 for other purposes." Radio Broadcasting Services; Transmission of Program Related Signals in the Vertical Blanking Interval of the Standard Television Signal, 46 Fed. Reg. 40024, August 6, 1981 (emphasis supplied).^{28/}

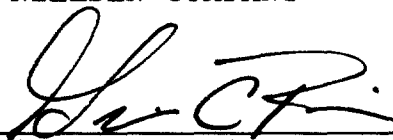
^{28/}Actual experience in the market has confirmed these conclusions. Specifically, while the established television networks use line 20 to transmit AMOL codes, at least one of the networks transmits other information on line 20 in addition to the SID codes, and does so using code-sensing and shut-off equipment similar to that proposed in the text at Para. 27 and in Nielsen's Comments at Para. 20.

34. As was the case during the Commission's consideration of requests to use line 20 to transmit SID codes, the proper role for the Commission in this area was clearly stated by VidCode in its Comments at 7: "It is rudimentary that, in accordance with statutory mandate, the Commission acts where possible to promote competition, since in general competition promotes the public interest." VidCode Comments at 7 (citations omitted). In this case, that purpose would be best served by granting Nielsen's Request under the same terms and conditions that have been applied to other authorized users because it would allow Nielsen, Airtrax, VidCode, and any other similar service provider to compete in the marketplace. It would not be served, and, indeed, would be disserved, by acceding to Airtrax's request for protection from the competitive marketplace by denying Nielsen access to the same facilities, for the same purpose, and under the same restrictions, as are applicable to Nielsen's competitors.

For the foregoing reasons, Nielsen strongly urges the Commission to grant its Request for Permissive Authority, and to do so expeditiously.

Respectfully submitted,

A.C. NIELSEN COMPANY

By: 
Grier C. Raclin, Esq.

Heron, Burchette, Ruckert &
Rothwell
1025 Thomas Jefferson St., N.W.
Washington, D.C. 20007
(202) 337-7700

Its Attorneys

Of Counsel:

Philip L. Verveer, Esq.
Willkie, Farr & Gallagher
1155 21st Street, N.W.
Washington, D.C. 20036

Dated: October 2, 1989

Commercial By Market
Daniel Pharmaceuticals

Reporting Period: 4-4-88 to 4-10-88

Commercial: QAAF CR 5 99 1
Title: Medicated Ice Pack - Jennifer's Mom

Broadcast Features:

Stereo (St): YES
SAP (Sap) : NO
Color (Co) : YES

Agency: Jason Advertising
Length: 15:00 seconds
Encode Date: April 4, 1988

SAMPLE
REPORT

Market	Station	Start Date	Start Time	Features as run			Error Report	
				St	Sap	Co	Description	Time
Chicago IL	WBBM	04-08-88	11:00:01	Y	N	Y	Upcut at frame	00:13:10
	WCFC	04-05-88	14:20:54	Y	N	Y	Good	
		04-10-88	04:03:00	Y	N	Y	Color dropout	00:06:00 to 00:13:01
							Sound fault	00:00:09 to 00:05:10
							Sound fault	00:10:01 to 00:13:04
							Stereo fault	00:10:01 to 00:13:05
		04-10-88	14:21:55	Y	N	Y	Good	
Los Angeles CA		04-10-88	16:10:15	Y	N	Y	Late start	00:01:14
		04-10-88	19:21:55	Y	N	Y	Good	
	KABC	04-05-88	12:22:31	Y	N	Y	Good	
		04-07-88	10:11:01	Y	N	Y	Stereo dropout	00:01:10 to 00:02:00
		04-09-88	08:11:02	Y	N	Y	Good	
	KNBC	04-07-88	10:11:01	Y	N	Y	Video dropout	00:02:14 to 00:03:13
		04-09-88	08:11:02	Y	N	Y	Good	
New York NY	WNBC	04-04-88	01:00:01	N	N	Y	Good	
	WABC	04-05-88	14:20:54	N	N	Y	Good	
		04-07-88	12:10:58	Y	N	Y	Color dropout	00:01:00 to 00:04:01
							Video dropout	00:01:10 to 00:04:01
							Sound fault	00:00:09 to 00:05:10
Chicago IL		04-08-88	14:21:55	N	N	Y	Good	
	WBBM	04-08-88	11:00:01	Y	N	Y	Upcut at frame	13:10
	WCFC	04-05-88	14:20:54	Y	N	Y	Good	
		04-10-88	04:03:00	Y	N	Y	Color dropout	06:00 to 13:01
							Sound fault	00:09 to 05:10
							Sound fault	10:01 to 13:04
							Stereo fault	10:01 to 13:05
		04-10-88	14:21:55	Y	N	Y	Good	
		04-10-88	16:10:15	Y	N	Y	Late start	01:14
		04-10-88	19:21:55	Y	N	Y	Good	

SAMPLE
REPORT

NOTE: This is a sample report. It does not reflect the airing of actual commercials, or imply the installation of Airtrax receivers in any city.

Exception Report
Daniel Pharmaceuticals

Reporting Period: 4-4-88 to 4-10-88

Airings with more than 3 faults
and a total fault duration of 2 seconds or more.

Commercial: QAAF CR 5 99 1

Title: Medicated Ice Pack - Jennifer's Mom

Broadcast Features:

Stereo (St): YES

SAP (Sap) : NO

Color (Co) : YES

Agency: Jason Advertising

Length: 15:00 seconds

Encode Date: April 4, 1988

Market	Station	Start Date	Start Time	Error Report Description	Time
Chicago	WCFC	04-10-88	04:03:00	Color dropout	00:06:00 to 00:13:01
				Sound fault	00:00:09 to 00:05:10
				Sound fault	00:10:01 to 00:13:04
				Stereo fault	00:10:01 to 00:13:05
New York	WABC	04-07-88	12:10:58	Color dropout	00:01:00 to 00:04:01
				Video dropout	00:01:10 to 00:04:01
				Sound fault	00:00:09 to 00:05:10

SAMPLE
REPORT

NOTE: This is a sample report. It does not reflect the airing of actual commercials, or imply the installation of Airtrax receivers in any city.

Commercial By Date and Time
Daniel Pharmaceutical

Reporting Period: 4-4-88 to 4-10-88

Commercial: QAAF CR 5 99 1

Title: Medicated Ice Pack - Jennifer's Mom

Broadcast Features:

Stereo (St): YES

SAP (Sap) : NO

Color (Co) : YES

Agency: Jason Advertising

Length: 15:00 seconds

Encode Date: April 4, 1988

SAMPLE
REPORT

Day/Date/Time	Market	Station	Features as run			Error Report	
			St	Sap	Co	Description	Time
Monday 04-04-88							
01:00:01	New York, NY	WNBC	Y	N	Y	Good	
Tuesday 04-05-88							
12:22:31	Los Angeles, CA	KABC	Y	N	Y	Good	
14:20:54	Chicago, IL	WCFC	Y	N	Y	Good	
14:20:54	New York, NY	WABC	Y	N	Y	Good	
Wednesday 04-06-88							
Commercial not shown							
Thursday 04-07-88							
10:11:01	Los Angeles, CA	KABC	Y	N	Y	Stereo dropout	00:01:10 to 00:02:00
			N	N	Y	Video dropout	00:02:14 to 00:03:13
12:10:58	New York, NY	WABC	Y	N	Y	Color dropout	00:01:00 to 00:04:01
			Y	N	Y	Sound fault	00:00:09 to 00:05:10
			Y	N	Y	Video dropout	00:01:10 to 00:04:01
Friday 04-08-88							
11:00:01	Chicago, IL	WBBM	Y	N	Y	Upcut at frame	00:13:10
14:21:55	New York, NY	WABC	N	N	Y	Good	
Saturday 04-09-88							
08:11:02	Los Angeles, CA	KABC	Y	N	Y	Good	
						Good	
Sunday 04-10-88							
04:03:00	Chicago, IL	WCFC	Y	N	Y	Color dropout	00:06:00 to 00:13:01
						Sound fault	00:00:09 to 00:05:10
						Sound fault	00:10:01 to 00:13:04
						Stereo fault	00:10:01 to 00:13:05
14:21:55	Chicago, IL	WCFC	Y	N	Y	Good	
16:10:15	Chicago, IL	WCFC	Y	N	Y	Late start	00:01:14
19:21:55	Chicago, IL	WCFC	Y	N	Y	Good	

SAMPLE
REPORT

SAMPLE
REPORT

NOTE: This is a sample report. It does not reflect the airing of actual commercials, or imply the installation of Airtrax receivers in any city.

AIRTRAX
16830 Ventura Blvd.
Encino, CA 91436

Gentlemen:

We understand you will need to obtain a copy of the tape prior to broadcast for AirTrax encoding and please contact the person indicated below to coordinate that effort.

During the demonstration period, you will fax the computer reports to the contact person, or my designee only, and no other use of the data is authorized. But, we will be available to you and your staff for evaluation and feedback of the AirTrax system during the test period.

We also hereby authorize and permit you to contact our post house and television station in the Los Angeles market to insure a smooth test and present this authorization letter as required.

Company

Title

Please print name

Signature

Please send the data reports to:

Company: _____

Name: _____

Phone: _____

Person to contact to obtain tapes:

Company: _____

Name: _____

Phone: _____

AIRTRAX

AIRTRAX
16830 Ventura Blvd.
Encino, CA 91436

RE: SYNDICATOR TEST

Gentlemen:

We, the undersigned, do wish to participate in your free demonstration services for Syndicators of the Airtrax verification and clearance system during the month of January in the Los Angeles market.

We understand you will need to obtain a copy of the tape prior to broadcast for AirTrax encoding and please contact the person indicated below to coordinate that effort.

During the demonstration period, you will fax the computer reports to the contact person, or my designee only, and no other use of the data is authorized. But, we will be available to you and your staff for evaluation and feedback of the AirTrax system during the test period.

We also hereby authorize and permit you to contact our post house and television station in the Los Angeles market to insure a smooth test and present this authorization letter as required.

Accepted by: _____ DATE: _____

Company

Title

Please print name

Signature

Please send the data reports to:
 Company: _____
 Name: _____
 Phone: _____

Person to contact to obtain tapes:
Company: _____
Name: _____
Phone: _____

AIRTRAX

January 20, 1989

Dear Syndicator:

To participate in the free AirTrax demonstration requires that we obtain a tape copy of any show including Barter Spots (if any) so we may encode the show and return it for distribution through your normal channels, or we will deliver it on your behalf, directly to the station in Los Angeles for broadcast. During this demonstration period, we will be encoding these tapes in our own Video Tape Mastering Center (VTMC) that we have deployed using state of the art equipment in Los Angeles to assist us during our engineering efforts.

To insure that the AirTrax encoding does not in any way interfere with the quality of the broadcast, we have purchased and installed in our VTMC the Tektronix VM700 video measuring system.

When the AirTrax system is fully deployed, all encoding will take place in your normal post or production house in a transparent manner by their personnel.

During the demonstration period, we will fax the computer reports to you for your evaluation and comment.

We have discussed with Tim Duncan, the Executive Director of ASTA, the exact form of report that the ASTA members need and have offered to allow ASTA to come up with a standard clearance report that the AirTrax system will incorporate during the deployment period.

Please sign the enclosed authorizing us to begin the test and complete the information of who you wish us to contact in your organization during this test.

Sincerely,

Arnold Dubin
CEO
AirTrax



EXECUTIVE SUMMARY (updated January 1989)

AIRTRAX is an independent, third party verification and clearance service that confirms the actual airing of television program material and commercials.

AIRTRAX is activated by a unique identifier inserted on line 22 of the television signal with FCC approval. The unique identifier is not visible during regular television viewing. It does not interfere with television transmission or reception. It does not alter the quality of a commercial or program.

AIRTRAX provides verification of any broadcast of an encoded commercial or program:

- ✓ Report of actual air time.
- ✓ Report of station call letters, network affiliation, or cable network.
- ✓ Comparison of run time as aired to actual length of material. Report of any exceptions.
- ✓ Report of program episode number or commercial ISCI code.
- ✓ Report commercial ISCI code within syndication show.
- ✓ Report of any loss of carrier, video, audio or color during length of encoded material.
- ✓ Verification of presence of MTS stereo and SAP audio pilot.

AIRTRAX encoding will take place in your normal post or production house in a transparent manner by their personnel when the system is fully deployed.

AIRTRAX data encoding, data receiving and reporting are part of a system that will be audited for accuracy by a Big 8 accounting firm.

AIRTRAX provides hard copy reports of all data requested on a next day basis. Electronic reporting with a direct interface to accounting, media and post buy analysis systems will be available by late 1989.

AIRTRAX is currently in Los Angeles and will be deployed in New York and Chicago in February 1989. Beginning April 1989, **AIRTRAX** will begin deployment in ADI market order to reach 82% household coverage (top 75 markets) during the 1989 television season. Airtrax will continue deployment up to 95% household coverage (top 142 markets) based on client service requirements by the 1990 television season.

AIRTRAX is a Secure System! Broadcasters do not have the equipment to alter or delete the unique identifier unless an intentional attempt is made. There will be two separately placed, fully redundant receive sites in each installed city. The customer information data base is secure and accessible only to Airtrax.

B1AK001



APPLICATIONS

(updated January 1989)

COMMERCIAL TRACKING VERIFICATION

This is the simplest and most obvious application for Airtrax. Encoding commercials with the Airtrax unique identifier provides positive verification each time a commercial airs.

TIME SENSITIVE COMMERCIALS

Airtrax's overnight reporting capability makes it possible to request make goods for incorrect or missed spots in the current buy. This avoids Advertiser refunds where make goods outside the current buy are not permitted.

SYNDICATED AND BARTER PROGRAM MONITORING

Encoding daily strip series, weekly features, movie packages, or one time only specials with Airtrax unique identifier does much more than verify that a program ran.

For Barter Shows, Airtrax can provide clearance information by date, station and episode, including commercial clearance by ISCI code for advertisers and agencies.

For Cash Shows, Airtrax can provide broadcast monitoring by date, station and episode for the contract term up to 7 years. The Airtrax unique identifier only needs to be applied to the tape program master. The identifier is automatically copied whenever dubs are made for distribution.

Airtrax clearance information will be available on a next day basis after broadcast in all markets where Airtrax is deployed. Reports by Broadcast week and month are also available.

If the syndicator and station agree that a commercial make good should be broadcast, when the station re-broadcasts the commercial from the syndicated show, the AirTrax identifier will be received and AirTrax will be able to provide clearance of the make good.

Airtrax reports the total running time of a program. This lets you know if a station cut or time compressed an episode to substitute local spots or add more spots than permitted. This exact timing report will also tell you if credits or promotional considerations were clipped.

B1AK001

AIRTRAX

January 20, 1989

Dear Syndicator:

I would like to introduce the AirTrax computer technology services to you. Enclosed for your review is our updated press kit.

AirTrax has been designed to meet the needs of Syndicators, Advertisers, Agencies and Stations for a computer based system for verification and clearance information that is cost effective and more timely than current methods used. AirTrax has been in development and testing for over three years and is based on new patent pending technology. We are confident that we can succeed in this effort where others have failed in the past because our system has been developed and built solely for this purpose and does not utilize modified off-the-shelf equipment.

One of the major differences between AirTrax and the A.C. Nielsen AMOL system, is that AirTrax has been granted FCC approval to use the first line of active video where the AMOL code is recorded in the vertical blanking interval. As AirTrax is on line 22 of the active video, the AirTrax code is not subject to normal station broadcasting equipment processing which can interrupt the AMOL coding system.

To demonstrate the AirTrax system, we are prepared to offer your company free demonstration services on your 30 minute syndicated programs airing in the Los Angeles market during February '89. We have already begun testing for ASTA members and plan to begin testing for the major National Advertising Agencies next month as well.

Though final pricing has not been set, we anticipate our encoding charges to be between \$35 - \$85 per 30 minute show time. Our clearance reports per 30 minute show time should be \$.20 - \$.40 per market per episode for Cash Shows and \$.40 - \$.80 per market per episode for Barter Shows. The higher charge for Barter is due to clearance information on the commercials as well as the shows. Final pricing will be set pending results of the test and actual service levels requested by syndicators during the period February - September '89.

AIRTRAX

We also encourage your comments on our technology and services to assist us in meeting your needs and we look forward to working with you and/or your representative(s) during the demonstration and deployment period.

Please feel free to contact the undersigned if you would like to participate in the AirTrax test or if you have any questions.

Sincerely,

Arnold M. Dubin, CEO
AirTrax

P.S. You may also contact directly either of our Marketing Vice Presidents:

Eddie Ackerman
Los Angeles
(818) 784-4581
(800) 247-8722 - Outside of California

Mitch Feldman
New York
(212) 466-4708

cc: Eddie Ackerman
Mitch Feldman

Valley Stream Group, Ltd. 28 Fourth Street Valley Stream NY 11581

Tel. 516.568.9449 Fax. 516.568.9484

Oct. 2, 1989

**Mr. David H. Harkness
Nielsen Media Research
1290 Avenue of the Americas
New York NY 10104**

Dear Mr. Harkness,

You have asked me to comment on the relative complexity of modifying the SGR-38 SID Encoder (used, we understand, in Nielsen's "AMOL" service) to permit cessation of encoding to allow the AIRTRAX digital code to pass through the encoding process without disturbance, re-instituting the AMOL encoding process after the AIRTRAX codes are no longer present.

After viewing a sample AIRTRAX recording, it is my belief that the alterations required to allow the cessation and re-institution of encoding would be minimal. Most probably, a change to the microcontroller program (PROM change) is all that will be necessary.

Yours truly,


**Ronald G. Schlameuss
president**